(ORIGINAL, DESIGN, NATIONAL STAGE OF PCT OR CIP APPLICATION)

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name, I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: PROCESS FOR HEAT TREATING CERAMICS AND ARTICLES OF MANUFACTURE MADE THEREBY

the specification of which: (complete (a), (b) or (c) for type of application)

#### **REGULAR OR DESIGN APPLICATION**

|  | (a)<br>(b)  | [ X]  |          | ed hereto.<br>i on | as A   | Application Serial                | No        | and                      | was ame     | nded on      | ·       |  |  |
|--|---|---|----------|--------------------|--------|-----------------------------------|-----------|--------------------------|-------------|--------------|---------|--|--|
|  |   |   |          | PCT FILE           | D APP  | LICATION ENTE                     | RING N    | ATIONAL S                | STAGE       |              |         |  |  |
| A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  | (c)   | []  |          | cribed and cla     |        | n International Ap                | plication | n No                     | filed o     | n            | _and as |  |  |
| direct speeds apply the state of the state o |   | ACKNOWLEDGMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR |          |                    |        |                                   |           |                          |             |              |         |  |  |
| There start there is   | I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.   |   |          |                    |        |                                   |           |                          |             |              |         |  |  |
| #t   | I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations. §1.56(a).   |   |          |                    |        |                                   |           |                          |             |              |         |  |  |
| Hart office of the state of the | [ ] In compliance with this duty there is attached an information disclosure statement. 37 CFR 1.97.  |   |          |                    |        |                                   |           |                          |             |              |         |  |  |
| Hard Marie Hard  |   |   |          |                    |        | PRIORITY C                        | LAIM      |                          |             |              |         |  |  |
|  | I hereby claim foreign priority benefits under Title 35, United States Code §119 of any foreign application for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed. |   |          |                    |        |                                   |           |                          | n for       |              |         |  |  |
|  |   |   |          |                    |        | (complete (d)                     | or (e))   |                          |             |              |         |  |  |
|  | (d)   | [X]   | no such  | applications h     | ave be | en filed.                         |           |                          |             |              |         |  |  |
|  | (e)   | [ ]   | such app | olications have    | e been | filed as follows:                 |           |                          |             |              |         |  |  |
|  |   |   | EARL     |                    |        | PLICATION(S), IF<br>DESIGN) PRIOF |           |                          |             | ONTHS        |         |  |  |
|  |   | Cou   | ntry     | Application        | No.    | Date of Filing (day, month, ye    |           | Date of Is<br>day, month |             | Priority Cla | aimed   |  |  |
|  |   |   | ALL      |                    |        | TION(S), IF ANY<br>DESIGN) PRIOF  |           |                          |             | NTHS         |         |  |  |
|  |   | Cou   | ntry     | Application        | No.    | Date of Filing (day, month, ye    | -         | Date of Is               |             | Priority Cla | aimed   |  |  |
|  |   |   |          |                    |        | <del></del>                       |           | <del></del>              | <del></del> |              |         |  |  |

## **CONTINUATION-IN-PART**

(complete this part only if this is a continuation-in-part application)

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Registrations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

| 09/393,004  | September 9, 199  | 99 Pending  |   |
|---|---|---|---|
| (Application Serial No.)  | (Filing Date)   | (Status)  | (patented, pending, abandoned   |
| (Application Serial No.)  | (Filing Date)   | (Status)  | (patented, pending, abandoned   |
|   | POWER   | OF ATTORNEY   |   |
| As a named inventor, I here and transact all business in (List name and registration in                                       | the Patent and Trader   |   | or agent(s) to prosecute this applicati ted therewith.  |
| John J. Priz<br>Larry R. Me<br>Stanislav A<br>James G. P<br>Stephen T.<br>John M. Ha<br>Thomas W.<br>Thomas Liz               | eenan<br>ntolin<br>Porcelli<br>Belsheim<br>lan<br>Cole  | Registration Registration Registration Registration Registration Registration | n No. 29,970<br>n No. 33,423<br>n No. 34,979<br>n No. 33,757<br>n No. 28,688<br>n No. 35,534<br>n No. 28,290<br>n No. 35,252                      |
| SEND CORRESPO<br>John J. Prizzi<br>Kennametal Ind<br>P. O. Box 231<br>Latrobe, PA 15  | s.  | DIRECT TELEF<br>John J. Priz<br>(724) 539-5                                   |   |
| made on information and be<br>the knowledge that willful fa-<br>both, under Section 1001 of<br>jeopardize the validity of the | elief are believed to be<br>lise statements and the<br>Title 18 of the United<br>application or any pa  | true; and further the like so made are States Code and the                    | ge are true and that all statements nat these statements were made with punishable by fine or imprisonment, nat such willful false statements may |
|   | 1.  | ehrotra   |   |
| Full name of sole or first inverse  |   | \   |   |
| Inventor's signature Pau  |   | Ventra  |   |
| Inventor's signature Paul Date 5/9/2000   | Country   | of Citizenship  | U.S.A.  |
| Inventor's signature Foundation  Date 5/9/2000  Residence Green   | Country of tensburg, Pennsylvani  | a 15601   |   |
| Inventor's signature Foundation  Date 5/9/2000  Residence Green   | Country of tensburg, Pennsylvani  | a 15601   | U.S.A.  |
| Inventor's signature Paul Date 5/9/2000 Residence Gree Post Office Address 23   | Country of | a 15601<br>burg, PA 15601<br>Garman   |   |
| Inventor's signature Paul Date 5/9/2000 Residence Gree Post Office Address 23 Full name of second joint inventor's signature  | Country of censburg, Pennsylvania Peters Road, Greensburg, Peters Road, Greensburg, if any Mark A   | a 15601<br>ourg, PA 15601<br>Garman   |   |

Post Office Address 306 Shady Oak Drive, Johnstown, PA 15905

| [ | X] | Signature for third and subsequent joint inventors.  Number of pages added _1  |
|---|----|--|
| [ | ]  | Signature by administrator(trix), executor(trix) or legal representative for deceased or incapacitated inventor. Number of pages added |
| [ | }  | Signature for inventor who refuses to sign or cannot be reached by person authorized under   |

35 CFR 1.47. Number of pages added \_\_\_.

# at the grant man man gave greet at all grant want grows give att at the first want grows give att at the first to man the greet which the state of the greet to the greet with the greet want to the greet want and the state want want the greet was the greet want to the greet want to



| Post Office Address3  Full name of fourth joint in Inventor's signature Date Post Office Address F  Full name of fifth joint inventor's signature Post Office Address F  Residence Post Office Address Post Office Address | Greensburg, Per 107 Attleboro P 107 Attleboro, if any | Country of Citizenship nnsylvania 15601 Place, Greensburg, PA Frank B. Battaglia Country of Citizenship Ivania 15650 D, Latrobe, PA 15650 | U.S.A.  U.S.A. |
|--|---|---|----------------|
| Residence  | Greensburg, Per 107 Attleboro P 107 Attleboro, if any | Country of Citizenship nnsylvania 15601 Place, Greensburg, PA Frank B. Battaglia Country of Citizenship Ivania 15650 D, Latrobe, PA 15650 | U.S.A.  U.S.A. |
| Post Office Address3  Full name of fourth joint in Inventor's signature Date Post Office Address F  Full name of fifth joint inventor's signature Post Office Address F  Residence Post Office Address Post Office Address | nventor, if any   | nnsylvania 15601 llace, Greensburg, PA Frank B. Battaglia Country of Citizenship lvania 15650 D, Latrobe, PA 15650                        | U.S.A.         |
| Full name of fourth joint in Inventor's signature  | nventor, if any   | Frank B. Battaglia  Country of Citizenship Ivania 15650  D. Latrobe, PA 15650   | U.S.A.         |
| Inventor's signature  Date Residence L  Post Office Address F  Full name of fifth joint inventor's signature  Date  Residence  Post Office Address  Full name of sixth joint inventor                                      | atrobe, Pennsyl   | Country of Citizenship<br>Ivania 15650<br>D, Latrobe, PA 15650  | U.S.A.         |
| Inventor's signature  Date Residence L  Post Office Address F  Full name of fifth joint inventor's signature  Date  Residence  Post Office Address  Full name of sixth joint inventor                                      | atrobe, Pennsyl   | Country of Citizenship<br>Ivania 15650<br>D, Latrobe, PA 15650  | U.S.A.         |
| Inventor's signature  Date Residence L  Post Office Address F  Full name of fifth joint inventor's signature  Date  Residence  Post Office Address  Full name of sixth joint inventor                                      | atrobe, Pennsyl   | Country of Citizenship<br>Ivania 15650<br>D, Latrobe, PA 15650  | U.S.A.         |
| Inventor's signature  Date Residence L  Post Office Address F  Full name of fifth joint inventor's signature  Date  Residence  Post Office Address  Full name of sixth joint inventor                                      | atrobe, Pennsyl   | Country of Citizenship<br>Ivania 15650<br>D, Latrobe, PA 15650  | U.S.A.         |
| Residence  | atrobe, Pennsyl   | Ivania 15650<br>D. Latrobe, PA 15650  | )              |
| Full name of fifth joint inventor's signature  Date  Residence  Post Office Address  Full name of sixth joint inventor   | R. D. 1, Box 366  | D, Latrobe, PA 15650  | )              |
| Full name of fifth joint inventor's signature  Date  Residence  Post Office Address  Full name of sixth joint inventor   | R. D. 1, Box 366  | D, Latrobe, PA 15650  | )              |
| Inventor's signature  Date  Residence  Post Office Address  Full name of sixth joint inv   |   |   |                |
| Inventor's signature  Date  Residence  Post Office Address  Full name of sixth joint inv   |   |   |                |
| Inventor's signature  Date  Residence  Post Office Address  Full name of sixth joint inv   |   |   |                |
| Inventor's signature  Date  Residence  Post Office Address  Full name of sixth joint inv   |   |   |                |
| Date Residence Post Office Address Full name of sixth joint inv  |   |   |                |
| Residence Post Office Address Full name of sixth joint inv   | (   |   | U.S.A.         |
| Post Office Address  |   | •   |                |
| Full name of sixth joint inv   |   |   |                |
|  |   |   |                |
|  |   | <del></del>   |                |
|  | ventor, if any  |   |                |
| inventor's signature   |   |   |                |
|  |   |   | U.S.A.         |
| Residence  |   |   |                |
|  |   |   |                |
|  |   |   |                |
| Y.   |   |   |                |
| Full name of seventh joint   | inventor, if any  |   |                |
|  |   |   |                |
|  |   |   | U.S.A.         |
| Residence  |   |   |                |
|  |   |   |                |
|  |   |   |                |

(ORIGINAL, DESIGN, NATIONAL STAGE OF PCT OR CIP APPLICATION)

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name, I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: PROCESS FOR HEAT TREATING CERAMICS AND ARTICLES OF MANUFACTURE MADE THEREBY

the specification of which: (complete (a), (b) or (c) for type of application)

|   | = | $\sim$ | 11 | L | ٩E | <b>3</b> / | <b>~</b> 1 | 0  |   | = | 0 | 10 | ٠. | 1 1 | ۸  | 1د | 0 | 1 | ~ | ٨ | 7 | 11 | ` | ۱ |
|---|---|--------|----|---|----|------------|------------|----|---|---|---|----|----|-----|----|----|---|---|---|---|---|----|---|---|
| n | Œ | u      | u  | L | ٩r | K 1        | <b>U</b>   | Λ. | L | _ | 3 | ľĿ | 30 | . , | ٠. | -  | 4 | _ | L | μ |   | ı۷ | J | г |

|   | (a)<br>(b)   | [X]<br>[]   |           | ed hereto.                | _ as App  | olication Ser              | ial No     |                 | and was am              | ended on     | ·        |  |  |
|---|--|---|-----------|---------------------------|-----------|----------------------------|------------|-----------------|-------------------------|--------------|----------|--|--|
|   |  |   |           | PCT FILED                 | APPLIC    | CATION EN                  | TERING     | NATION          | AL STAGE                |              |          |  |  |
| es la   | (c)  | []  |           | cribed and clai           |           | nternational .             | Applicati  | ion No          | filed                   | on           | _ and as |  |  |
| Hard Park   |  | ACKNOWLEDGMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR   |           |                           |           |                            |            |                 |                         |              |          |  |  |
| San San San   |  | I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above. |           |                           |           |                            |            |                 |                         |              |          |  |  |
| I acknowledge the duty to disclose information which is material to the examination of this applicable accordance with Title 37, Code of Federal Regulations. §1.56(a). |  |   |           |                           |           |                            |            | f this applicat | ion in                  |              |          |  |  |
| i<br>i<br>i   | [  | ] in c  | complianc | e with this duty          | there is  | attached an                | informa    | tion disc       | osure stater            | nent. 37 CFF | ₹ 1.97.  |  |  |
| PRIORITY CLAIM  |  |   |           |                           |           |                            |            |                 |                         |              |          |  |  |
| Henry Halls   | hereby claim foreign priority benefits under Title 35, United States Code §119 of any foreign application( |   |           |                           |           |                            |            |                 | n for                   |              |          |  |  |
|   |  |   |           |                           |           | (complete (                |            |                 |                         |              |          |  |  |
|   | (d)  | [X]   | no such   | applications ha           | ave been  | filed.                     |            |                 |                         |              |          |  |  |
|   | (e)  | []  | such app  | olications have           | been file | ed as follows              | <b>:</b> : |                 |                         |              |          |  |  |
|   |  |   | EARL      | IEST FOREIG.<br>(6 MONTH: |           | CATION(S)<br>ESIGN) PRI    |            |                 |                         | IONTHS       |          |  |  |
|   |  | Cou   | ntry      | Application               | No. (     | Date of Fil<br>day, month, |            |                 | of Issue<br>onth, year) | Priority Cl  | aimed    |  |  |
|   | -  |   | ALL       | FOREIGN APF<br>(6 MONTHS  |           | DN(S), IF AN<br>ESIGN) PRI |            |                 |                         | ONTHS        |          |  |  |
|   |  | Cou   | ntry      | Application               | No. (     | Date of Filday, month,     | -          |                 | of Issue<br>onth, year) | Priority Cl  | aimed    |  |  |
|   | _  |   |           |                           |           |                            |            |                 |                         |              |          |  |  |

## **CONTINUATION-IN-PART**

(complete this part only if this is a continuation-in-part application)

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Registrations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

| 09/393,004  | September 9, 199  | 99 Pending  |   |  |  |  |  |
|---|---|---|---|--|--|--|--|
| (Application Serial No.)  | (Filing Date)   | (Status)  | (patented, pending, abandoned)  |  |  |  |  |
|   |   |   |   |  |  |  |  |
| (Application Serial No.)  | (Filing Date)   | (Status)  | (patented, pending, abandoned)  |  |  |  |  |
|   | POWER   | OF ATTORNEY   |   |  |  |  |  |
|   |   |   |   |  |  |  |  |
| As a named inventor, I here and transact all business in (List name and registration I                              | the Patent and Traden   | g attorney(s) and/o<br>nark Office connec   | or agent(s) to prosecute this application ted therewith.  |  |  |  |  |
| John J. Priz<br>Larry R. Me<br>Stanislav Ar<br>James G. P<br>Stephen T. I<br>John M. Hal<br>Thomas W.<br>Thomas Liz | enan<br>ntolin<br>orcelli<br>Belsheim<br>lan<br>Cole                  | Registration No. 29,970 Registration No. 33,423 Registration No. 34,979 Registration No. 33,757 Registration No. 28,688 Registration No. 35,534 Registration No. 28,290 Registration No. 35,252 |   |  |  |  |  |
| SEND CORRESPO   | NDENCE TO:  | DIRECT TELEP  | HONE CALLS TO:  |  |  |  |  |
| John J. Prizzi  |   | John J. Priz  |   |  |  |  |  |
| Kennametal Inc.   |   | (724) 539-53  |   |  |  |  |  |
| P. O. Box 231   | 250   |   |   |  |  |  |  |
| Latrobe, PA 156   | )JU   |   |   |  |  |  |  |
| the knowledge that willful fals   | se statements and the Title 18 of the United Sapplication or any pate | rue; and further that<br>like so made are p<br>States Code and the<br>ent issued thereon.   | te are true and that all statements at these statements were made with unishable by fine or imprisonment, or at such willful false statements may |  |  |  |  |
| Inventor's signature  |   |   |   |  |  |  |  |
| Date  | Country of  | Citizenship   | U.S.A.  |  |  |  |  |
| Residence <u>Gree</u>   |   |   | J.S.A.  |  |  |  |  |
|   | eters Road, Greensbu  |   |   |  |  |  |  |
| Full name of second joint inve  | entor, if any <u>Mark A</u>   | Garman  |   |  |  |  |  |
| nventor's signature///  |   | nan   |   |  |  |  |  |
| Date _ 5/9/00   | Country of  | Citizenship   | U.S.A.  |  |  |  |  |
| Residence John  |   |   |   |  |  |  |  |
| Post Office Address 306 S   |   |   |   |  |  |  |  |
|   |   |   |   |  |  |  |  |

made made that the street

- [X] Signature for third and subsequent joint inventors. Number of pages added 1.
- [ ] Signature by administrator(trix), executor(trix) or legal representative for deceased or incapacitated inventor. Number of pages added \_\_\_\_.
- Signature for inventor who refuses to sign or cannot be reached by person authorized under 35 CFR 1.47. Number of pages added \_\_\_.

| Full name of third joint                        | inventor, if any    | Chuck E. Lipniskis     |        |  |  |  |  |  |
|---|---------------------|------------------------|--------|--|--|--|--|--|
| Inventor's signature                            |                     |                        |        |  |  |  |  |  |
| Date  |                     | Country of Citizenship | U.S.A. |  |  |  |  |  |
| Residence <u>Greensburg, Pennsylvania 15601</u> |                     |                        |        |  |  |  |  |  |
|   |                     |                        | 15601  |  |  |  |  |  |
|   |                     |                        |        |  |  |  |  |  |
|   |                     |                        |        |  |  |  |  |  |
| Full name of fourth joir                        | nt inventor, if any | Frank B. Battaglia     |        |  |  |  |  |  |
|   |                     |                        |        |  |  |  |  |  |
|   |                     |                        | U.S.A. |  |  |  |  |  |
|   |                     |                        |        |  |  |  |  |  |
|   |                     |                        |        |  |  |  |  |  |
|   |                     |                        |        |  |  |  |  |  |
|   |                     |                        |        |  |  |  |  |  |
| Full name of fifth joint                        | nventor if any      |                        |        |  |  |  |  |  |
|   |                     |                        |        |  |  |  |  |  |
|   |                     |                        |        |  |  |  |  |  |
|   |                     |                        | U.S.A. |  |  |  |  |  |
|   |                     |                        |        |  |  |  |  |  |
| Fost Office Address _                           |                     |                        |        |  |  |  |  |  |
| 3.  |                     |                        |        |  |  |  |  |  |
| To Handan and at at the table                   |                     |                        |        |  |  |  |  |  |
|   |                     |                        |        |  |  |  |  |  |
|   |                     |                        |        |  |  |  |  |  |
|   |                     |                        | U.S.A. |  |  |  |  |  |
|   |                     |                        |        |  |  |  |  |  |
| Post Office Address _                           |                     |                        |        |  |  |  |  |  |
|   |                     |                        |        |  |  |  |  |  |
|   |                     |                        |        |  |  |  |  |  |
|   |                     |                        |        |  |  |  |  |  |
| Inventor's signature                            |                     |                        |        |  |  |  |  |  |
|   |                     |                        | U.S.A. |  |  |  |  |  |
| Residence                                       |                     |                        |        |  |  |  |  |  |
| Post Office Address _                           | · <del></del>       |                        |        |  |  |  |  |  |

(ORIGINAL, DESIGN, NATIONAL STAGE OF PCT OR CIP APPLICATION)

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name, I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: PROCESS FOR HEAT TREATING CERAMICS AND ARTICLES OF MANUFACTURE MADE THEREBY

the specification of which: (complete (a), (b) or (c) for type of application)

| REGUL | AR OR | DESIGN | APPI | ICATI | ON |
|-------|-------|--------|------|-------|----|
|       |       |        |      |       |    |

| (a)<br>(b)  | [X]     |                         | hed hereto.<br>d on                | _ as Application Serial No                              | o and was                               | s amended on  |  |  |
|---|---------|-------------------------|------------------------------------|---|---|---|--|--|
|   |         |                         | PCT FILED                          | APPLICATION ENTERI                                      | NG NATIONAL STA                         | AGE   |  |  |
| (c)   | []      | was de                  | scribed and clai                   | med in International Appli                              | cation No f                             | iled on and as  |  |  |
|   |         | ACI                     | KNOWLEDGME                         | ENT OF REVIEW OF PAR                                    | PERS AND DUTY O                         | F CANDOR  |  |  |
| I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above. |         |                         |                                    |   |   |   |  |  |
| l ack   | nowle   | dge the d<br>with Title | uty to disclose in a 37, Code of F | information which is mater<br>rederal Regulations. §1.5 | rial to the examination 6(a).           | on of this application in   |  |  |
| 1   | ] in c  | compliand               | e with this duty                   | there is attached an infor                              | mation disclosure st                    | atement. 37 CFR 1.97.   |  |  |
|   |         |                         |                                    | PRIORITY CLA  | IM                                      |   |  |  |
| ioi pi  | atent o | rinvento                | rs cennicate list                  | ted below and have also i                               | dentified below any t                   | any foreign application(s) foreign application for which priority is claimed. |  |  |
|   |         |                         |                                    | (complete (d) or (                                      |   |   |  |  |
| (d)   | [X]     | no such                 | applications ha                    | ve been filed.  |   |   |  |  |
| (e)   | []      | such ap                 | olications have                    | been filed as follows:                                  |   |   |  |  |
|   |         | EARL                    | IEST FOREIGN.<br>6 MONTHS          | N APPLICATION(S), IF AI<br>FOR DESIGN) PRIOR T          | NY FILED WITHIN 1<br>O SAID APPLICATION | 2 MONTHS<br>ON  |  |  |
|   | Cour    | ntry                    | Application N                      | Date of Filing lo. (day, month, year)                   | Date of Issue<br>(day, month, yea       | ar) Priority Claimed  |  |  |
|   |         |                         |                                    |   |   |   |  |  |
|   |         | ALL I                   | FOREIGN APPL<br>(6 MONTHS          | LICATION(S), IF ANY FIL<br>FOR DESIGN) PRIOR TO         | ED MORE THAN 12<br>O SAID APPLICATION   | MONTHS  |  |  |
|   | Coun    | ntry                    | Application N                      | Date of Filing o. (day, month, year)                    | Date of Issue (day, month, yea          | r) Priority Claimed   |  |  |
|   |         |                         |                                    |   |   |   |  |  |

#### CONTINUATION-IN-PART

(complete this part only if this is a continuation-in-part application)

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Registrations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

| 09/393,004  | September 9, 199   |   |  |
|---|--|---|--|
| (Application Serial No.)                                | (Filing Date)  | (Status)  | (patented, pending, abandoned)   |
| (Application Serial No.)                                | (Filing Date)  | (Status)  | (patented, pending, abandoned)   |
|   | POWER  | OF ATTORNEY   |  |
| As a named inventor, I                                  | hereby appoint the followin                                  | g attornev(s) and/c   | or agent(s) to prosecute this application  |
| and transact all busines<br>(List name and registration | is in the Patent and Traden                                  | nark Office connec  | ted therewith.   |
| John J.   |  | Registration  | No. 29,970   |
|   | . Meenan   |   | No. 33,423   |
|   | av Antolin   | Registration  |  |
|   | G. Porcelli<br>n T. Belsheim                                 | Registration  |  |
| John M  |  | Registration<br>Registration                                      | No. 25,534   |
|   | s W. Cole  | Registration  |  |
| Thomas  |  | Registration  |  |
| SEND CORRES   | SPONDENCE TO:  | DIRECT TELEP  | HONE CALLS TO:   |
| John J. Priz  | <b>z</b> i   | John J. Prizz   | zi   |
| Kennameta   | Inc.   | (724) 539-53  | <del></del> -  |
| P. O. Box 2   |  | ( = , ====  |  |
| Latrobe, PA   | 15650  |   |  |
| the knowledge that willfupoth, under Section 100        | d belief are believed to be t<br>If faise statements and the | rue; and further tha<br>like so made are p<br>States Code and tha | e are true and that all statements at these statements were made with unishable by fine or imprisonment, or at such willful false statements may |
| Full name of sole or first                              | inventor Pankaj K. Meh                                       | rotra   |  |
| nventor's signature                                     |  |   |  |
| Date  | Country of   | Citizenship   | U.S.A.   |
|   | Greensburg, Pennsylvania                                     |   |  |
| Post Office Address                                     | 23 Peters Road, Greensbu                                     | rg, PA 15601  |  |
|   |  |   |  |
| rull name of second joins                               | t inventor, if any <u>Mark A</u>                             | Garman  |  |
|   |  |   |  |
| Pasidance   | Country of   | Citizenship   | U.S.A.   |
| Post Office Address s                                   | Johnstown, Pennsylvania                                      | 15905   |  |
|   |  |   |  |

**=** 

Thus there that although the

| [ X] | Signature for third and subsequent joint inventors.  Number of pages added _1  |
|------|--|
| [ ]  | Signature by administrator(trix), executor(trix) or legal representative for deceased or incapacitated inventor. Number of pages added |
| [ ]  | Signature for inventor who refuses to sign or cannot be reached by person authorized unde 35 CFR 1.47. Number of pages added           |

| Full name of third joint inventor, if ar  | iy <u>Chuck E Lipniskis</u> |     |              |
|---|-----------------------------|-----|--------------|
| Inventor's signature _ Church             | Lipnishia                   |     |              |
| Date <u>5-9-00</u>                        |                             |     |              |
| Residence Greensburg                      |                             |     |              |
| Post Office Address 3107 Attleb           |                             |     |              |
| ,   |                             |     |              |
|   |                             |     |              |
| Full name of fourth joint inventor, if a  | any Frank B. Battaglia      |     |              |
| Inventor's signature                      |                             |     |              |
| Date                                      |                             |     |              |
| Residence Latrobe, Pe                     |                             |     |              |
| Post Office Address R. D. 1, Box          |                             |     |              |
|   |                             |     |              |
|   |                             |     |              |
| Full name of fifth joint inventor, if any | /                           |     |              |
| Inventor's signature                      |                             |     |              |
| Date                                      |                             |     |              |
| Residence                                 |                             |     |              |
| Post Office Address                       |                             |     |              |
|   | <del> </del>                |     |              |
|   |                             |     |              |
| Full name of sixth joint inventor, if ar  | nv                          |     |              |
| Inventor's signature                      |                             |     | <del> </del> |
| Date                                      |                             |     |              |
| Residence                                 |                             |     |              |
| Post Office Address                       |                             |     |              |
|   |                             |     |              |
|   |                             |     |              |
| Full name of seventh joint inventor, i    | f anv                       |     |              |
| Inventor's signature                      |                             |     |              |
| Date                                      |                             | HSA |              |
|   |                             |     |              |
| Residence Post Office Address             |                             |     |              |
|   |                             |     |              |
|   |                             |     |              |

(ORIGINAL, DESIGN, NATIONAL STAGE OF PCT OR CIP APPLICATION)

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name, I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: PROCESS FOR HEAT TREATING CERAMICS AND ARTICLES OF MANUFACTURE MADE THEREBY

the specification of which: (complete (a), (b) or (c) for type of application)

| (a)<br>(b)     | [X]                |                         | ched hereto.<br>ed on                    | as Application Serial No.  | and was am   | ended on            |
|----------------|--------------------|-------------------------|--|--|--|---------------------|
|                |                    |                         | PCT FILED                                | APPLICATION ENTERIN  | G NATIONAL STAGE                                     |                     |
| (c)            | []                 | was de<br>amend         | scribed and claim                        | ned in International Applic  | ation No filed                                       | on and as           |
|                |                    | AC                      | KNOWLEDGMEN                              | NT OF REVIEW OF PAPE   | ERS AND DUTY OF CA                                   | ANDOR               |
| I her<br>inclu | eby sta<br>ding th | ate that l<br>ne claims | have reviewed ar<br>s, as amended by     | nd understand the conten<br>any amendment referred   | ts of the above identifie to above.                  | ed specification,   |
| l ack<br>acco  | nowled<br>rdance   | dge the e<br>with Til   | duty to disclose in<br>le 37, Code of Fe | formation which is materion deral Regulations. §1.56   | al to the examination of (a).                        | this application in |
| [              | ] In c             | omplian                 | ce with this duty t                      | here is attached an inform   | nation disclosure staten                             | nent. 37 CFR 1.97.  |
|                |                    |                         |  | PRIORITY CLAIM   | vi   |                     |
| ioi pa         | atent o            | rinvento                | ors certificate liste                    | s under Title 35, United Sied below and have also id<br>a filing date before that o<br>(complete (d) or (e | entified below any forei<br>f the application on whi | on application for  |
| (d)            | [X]                | no such                 | applications have                        |  | 7))  |                     |
| (e)            | [ ]                |                         |  | een filed as follows:  |  |                     |
| . ,            | . 1                |                         | LIEST FOREIGN                            | APPLICATION(S), IF AN<br>FOR DESIGN) PRIOR TO  | Y FILED WITHIN 12 M<br>SAID APPLICATION              | ONTHS               |
|                | Cour               | ntry                    | Application No                           | Date of Filing (day, month, year)  | Date of Issue<br>(day, month, year)                  | Priority Claimed    |
|                |                    | ALL                     | FOREIGN APPLI<br>(6 MONTHS F             | CATION(S), IF ANY FILE<br>FOR DESIGN) PRIOR TO   | ED MORE THAN 12 MC                                   | DNTHS               |
|                | Coun               | itry                    | Application No                           | Date of Filing . (day, month, year)  | Date of Issue<br>(day, month, year)                  | Priority Claimed    |
|                | ·                  |                         |  |  |  |                     |

Inventor's signature \_\_\_\_

Residence \_\_\_\_\_\_ Johnstown, Pennsylvania 15905

Post Office Address 306 Shady Oak Drive, Johnstown, PA 15905

Date \_

#### CONTINUATION-IN-PART

(complete this part only if this is a continuation-in-part application)

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Registrations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

| 09/393,004   | September 9, 19  | 99 Pending  |   |
|--|--|---|---|
| (Application Serial No.)   | (Filing Date)  | (Status)  | (patented, pending, abandoned)  |
| (Application Serial No.)   | (Filing Date)  | (Status)  | (patented, pending, abandoned)  |
|  | POWER  | OF ATTORNEY   |   |
| As a named inventor, I here and transact all business in (List name and registration   | the Patent and Trader  | ng attorney(s) and/onark Office connec  | or agent(s) to prosecute this application ted therewith.  |
| John J. Prizzi Larry R. Meenan Stanislav Antolin James G. Porcelli Stephen T. Belsheim John M. Halan Thomas W. Cole Thomas Lizzi |  | Registration Registration Registration Registration Registration Registration             | n No. 29,970<br>n No. 33,423<br>n No. 34,979<br>n No. 33,757<br>n No. 28,688<br>n No. 35,534<br>n No. 28,290<br>n No. 35,252                        |
| SEND CORRESPONDENCE TO:  John J. Prizzi  Kennametal Inc. P. O. Box 231  Latrobe, PA 15650  |  | DIRECT TELEF<br>John J. Priz<br>(724) 539-5   |   |
| the knowledge that willful fa<br>both, under Section 1001 of<br>eopardize the validity of the                                    | se statements and the<br>Title 18 of the United Sapplication or any pate | true; and further the<br>like so made are p<br>States Code and the<br>ent issued thereon. | ge are true and that all statements at these statements were made with punishable by fine or imprisonment, or lat such willful false statements may |
| Full name of sole or first inve  |  |   |   |
| nventor's signature  |  |   |   |
|  | Country o  |   | U.S.A.  |
| ResidenceGre   |  |   |   |
|  | 3.4. 5 . 6   | <b>—</b>  |   |
| Post Office Address 23 F   | reters Road, Greensbu  | urg, PA 15601   |   |

Country of Citizenship U.S.A.

| <b>(</b> ] | (] | Signature for third and subsequent joint inventors.  Number of pages added _1  |
|------------|----|--|
| [          | ]  | Signature by administrator(trix), executor(trix) or legal representative for deceased or incapacitated inventor. Number of pages added |
| [          | ]  | Signature for inventor who refuses to sign or cannot be reached by person authorized unde  |

| Full name of third joint is | nventor, if any _   | Chuck E. Lipniskis     |        |
|-----------------------------|---------------------|------------------------|--------|
| Inventor's signature        |                     |                        |        |
|                             |                     |                        | U.S.A. |
|                             |                     |                        |        |
| Post Office Address         | 3107 Attleboro      | Place, Greensburg, PA  | 15601  |
|                             |                     |                        |        |
|                             | •                   |                        |        |
| Full name of fourth joint   | inventor, if any    | Frank B. Battaglia,    |        |
| Inventor's signature        | Truh                | B Bettengles           |        |
| Date 5/14/00                |                     | Country of Citizenship | U.S.A. |
| , ,                         |                     |                        |        |
|                             |                     |                        |        |
|                             |                     |                        |        |
|                             |                     |                        |        |
| Full name of fifth joint in | ventor, if any      |                        |        |
|                             |                     |                        |        |
|                             |                     |                        | U.S.A. |
|                             |                     |                        |        |
|                             |                     |                        |        |
|                             |                     |                        |        |
|                             |                     |                        |        |
| Full name of sixth joint i  | inventor, if any _  |                        |        |
|                             |                     |                        |        |
|                             |                     |                        | U.S.A. |
|                             |                     |                        |        |
|                             |                     |                        |        |
|                             |                     |                        |        |
|                             |                     |                        |        |
| Full name of seventh jo     | int inventor, if an | ıy                     |        |
| Inventor's signature        |                     |                        |        |
|                             |                     |                        | U.S.A. |
|                             |                     |                        |        |
|                             |                     |                        |        |
|                             |                     |                        |        |
|                             |                     |                        |        |